

Please amend the claims as follows:

Please amend the claims as follows:

1. (Currently Amended) ~~Audio-An audio enhancement system (1),~~  
comprising:  
~~\_\_\_\_\_ audio signal (z, y, x) inputs for a distorted desired~~  
~~signal (z, x) and at least a reference signal (y), and~~  
~~\_\_\_\_\_ a spectral processor (PP) coupled to the audio signal (z,~~  
~~y, x) inputs for processing the distorted desired signal in order~~  
~~to provide just the desired signal, said spectral processor~~  
~~using (z, x) by means of the at least one reference signal (y)~~  
~~acting as an estimate for the distortion of the desired signal (z,~~  
~~x), characterized in that the spectral processor (PP) is arranged~~  
~~for modifying said processing processes said distorted desired~~  
~~signal in such a way that the estimate for the distortion is a~~  
~~function of A times the spectral power of the at least one~~  
~~reference signal (y), where A is a ratio between the time averaged~~  
~~spectral power of the distortion of the desired signal and the time~~  
~~averaged spectral power of the at least one reference signal (y).~~

2. (Currently Amended) ~~Audio~~ The audio enhancement system (1) ~~according to~~ as claimed in claim 1, characterized in that the estimate for the distortion is at least partly proportional to A times the spectral power of the ~~al~~ at ~~least~~ one reference signal (4).

3. (Currently Amended) ~~Audio-The audio enhancement system (1)~~  
~~according to as claimed in~~ claim 1, characterized in that the  
estimate for the distortion at least partly depends on the signal  
to noise ratio of the distorted desired signal ~~( $z$ ,  $r$ )~~.

4. (Currently Amended) ~~Audio-The audio enhancement system (1)~~  
~~according to as claimed in~~ claim 1, characterized in that the  
respective spectral powers are defined by ~~some a~~ a positive function  
of the spectral power concerned, ~~such as said positive function~~  
5 being one of the spectral magnitude, the squared spectral  
magnitude, the power spectral density or the Mel-scale smoothed  
spectral density.

5. (Currently Amended) ~~Audio-The audio enhancement system (1)~~  
~~according to as claimed in~~ claim 1, characterized in that the ratio  
A is calculated based on data acquired during absence of the  
desired signal.

6. (Currently Amended) ~~Audio-The audio enhancement system (1)~~  
~~according to as claimed in~~ claim 5, characterized in that the speech  
enhancement system ~~(1)~~ further comprises a speech activity detector  
~~(DET), which is coupled to the spectral processor (PP)~~.

7. (Currently Amended) ~~Audio-The audio enhancement system (1)~~  
~~according to as claimed in~~ claim 1, characterized in that the audio

enhancement system ~~(1)~~ further comprises adaptive microphone filter means ~~(3)~~ coupled to the spectral processor ~~(PP)~~.

8. (Currently Amended) ~~Audio~~ The audio enhancement system ~~(1)~~ according to as claimed in claim 1, characterized in that the audio enhancement system ~~(1)~~ further comprises one or more loudspeakers ~~(6)~~ and echo cancelling filter means ~~(7)~~ coupled between the ~~at least one loudspeaker (6) or more loudspeakers~~ and the spectral processor ~~(PP)~~.

9. (Currently Amended) ~~System, in particular a~~ communication system, ~~for example a hands free communication device, such as a mobile telephone, or a voice controlled system, which system is provided with an audio enhancement system (1), the audio~~ enhancement system ~~(1)~~ comprising:  
..... audio signal ~~(z, r, y)~~ inputs for a distorted desired signal ~~(z, r)~~ and at least a reference signal ~~(y)~~; and  
..... a spectral processor ~~(PP)~~ coupled to the audio signal ~~(z, r, y)~~ inputs for processing the distorted desired signal in order to provide just the desired signal, said spectral processor using ~~(z, r) by means of the at least one reference signal (y) acting as an estimate for the distortion of the desired signal,~~ characterized in that the spectral processor ~~(PP)~~ is arranged for modifying said processing processes said distorted desired signal in such a way that the estimate for the distortion is a function of A times the spectral power of the at least one reference signal ~~(y)~~,

where A is a ratio between the time averaged spectral power of the distortion of the desired signal and the time averaged spectral power of the at least one reference signal— $\{y\}$ .

10. (Currently Amended) A method for enhancing a distorted desired signal— $\{z, r\}$ —in order to provide just the desired signal, said method comprising the steps of:

5 receiving a distorted desired signal and at least one reference signal; and

10 which signal is spectrally processed, processing the distorted desired signal whereby the at least one reference signal— $\{y\}$ —acts as an estimate for the distortion of the desired signal, characterized in that the spectral processing is performed such that the estimate for the distortion depends on A times the spectral power of the at least one reference signal— $\{y\}$ , where A is the ratio between the time averaged spectral power of the distortion of the desired signal and the time averaged spectral power of the at least one reference signal— $\{y\}$ .